Two New Species of Hemiptera in the Collections of the Museum National of Paris,

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Through the kind permission of Professor Bouvier I have been able to study for some time in the Paris Museum. I wish therefore to thank him for this opportunity and also to express my appreciation to D^r Berland and D^r Séguy for the many courtesies they have extended to me from time to time during the progress of my work.

An examination of the aquatic Hemiptera in the Paris Museum has resulted in the location of several types, reported in the literature as lost and in the discovery of some undescribed species, two of which are described below.

Ranatra wagneri sp. n.

Size : Length from tip of beak to tip of abdomen 29 mm.-33 mm.; respiratory filaments 15 mm.-16 mm. long.

Color: While color is often of little significance in the Nepidae, the darker specimens of this species show a distinct mottling of light and dark brown on the legs and entire dorsal surface except that of the membrane of the hemelytra which is dark brown. Even the lightest colored specimen has a row of distinct dark spots along the outer or anterior margin of the hemelytra. The prosternum in most of the specimens black.

Shape : A very slender species with a long-narrow prothorax, the posterior section of which is short, narrow and not developed beneath. The meso- and metacoxae very prominent, the latter slightly carinate mesally.

Structural characteristics : Head wider than either the anterior or posterior section of the prothorax. Jugae et tylus about equally elevated. Antennae of male holotype are simple but the allotype and paratypes have the penultimate segment laterally produced.

Bulletin du Muséum, 2^e s., t. I, nº 3, 1929.

The prothorax is slender. The transverse growes deep and the anterior portion of the pronotum is nearly three times as long as the posterior portion. The measurement being made on the dorsal longitudinal median line. The prosternal growes are shallow but traceable throughout the length of the prosternum.

The scutellum is very slender, nearly as long as the posterior part of the pronotum.

Metasternal plate slightly raised and continued as a ridge between the hind coxae. Anterior femora slender without distal tooth or sinuosity a little shorter than the prothorax measured on its lateral line. Hind femora nearly attaining the posterior margin of the penultimate abdominal segment. The male genital clasper is slender, the antiapical toorth greatly reduced.

Notes : This species is described from 6 specimens, 2 males and 4 females, bearing the label « Muséum Paris, Misiones. Rio Parana, E. R. Wagner 1910 ». Holotype and allotype in the National Museum of Natural History in Paris.

This species differs from Ranatra brevicauda Montandon in having the interocular space much narrower than an eye; in having the a relatively shorter female genital operculum which surpasses the abdomen by only 3/11 of its length and by a general appearance not at all to be compared with R. formala Mayr and R. stali Montandon. Ranatra wagneri sp. n. is a smaller species than R. brevicauda Montd. and in shape has the appearance of Ranatra emaceala Montandon.

Velia conata sp. n.

Size : length 5 mm. which is three times the greatest width. Length of the insect is to the width of its head as $26 : 4 \frac{1}{3}$.

Color : Very dark chocolate brown nearly black with some silvery patches arranged as follows : a broad slightly sigmoid spot on either side of the median line on the anterior part of the pronotum ; a longitudinal stripe on the base of the hemelytra an three spots on the membrane, the anterior median one crescent shaped; small transverse spots on the connexivum at the sutural linesfive on each side of the abdomen. Under side of the body sparcely covered with grayish pile. Legs pale marked with brown. Cexae pale, trochanters mostly pale, median section of the femora with a broad pale band, tibiae each with two narrow pale bands.

Structural characteristics : Recognized at once by a tall conate elevation of the pronotum which lies behind a line drawn between the middle points of the humeri and in the line of the low median longitudinal carina.

Pronotum pitted, humeri but slightly elevated. Acetabula pitted. Last ventral segment of the abdomen narrowly emarginate in the male, the first genital segment slightly carinate. The genital claspers, flat, some what twisted plates about four times as long as broad. The connexivum not produced into pointed processes behind. First antennal segment with a diameter nearly double that of the second. Antennal formula.

1st seg. : 2nd seg. : 3rd seg. : 4th seg. :: 3 - : 3 : 4 : 3 3/4.

Legs rather short, hind femora unarmed and not more incrassate that the others. First torsal segment shortest, third longest.

Notes: This new species is described from a series of 13 specimens labeled : « Muséum Paris, Guyane Franc, Guanary. F. Geay, 1900 ». I have seen one specimen of this species also from. Para, Brazil.

Holotype, allotype and some paratypes in the Paris Museum. Other paratypes in my collection.

This species is about the size but a little more slender than *Velia brachealis.* Stal. The arrangement of the white spots on the hemelytra is the same except that in this new species the white basal spots are shorter, not surpassing the tip of the pronotal shield. The silvery spots on the anterior part of the pronotum are of different shape and occupy a different position. The banding of the legs is different, there being two pale bands on the femora and one on the tibiae in *Velia brachealis* Stal. The antennal formula and genital claspers of the male are also different in Stals species.